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Via Federal Express

May 12, 2005

Ms. Elizabeth O'Donnell **Executive Director**

Public Service Commission

211 Sower Boulevard, P.O. Box 615

Frankfort, Kentucky 40602-0615

MAY 13 2005

PUBLIC SERVICE COMMISSION

BIG RIVERS ELECTRIC CORPORATION Re:

PSC Administrative Case No. 2005-00090

Dear Ms. O'Donnell:

Enclosed are an original and ten copies of the response of Big Rivers Electric Corporation to Commission Staff's second data request dated April 28, 2005, in the above-styled matter. I certify that a copy of this filing has been served this day on the persons shown on the attached service list.

Sincerely yours, ,

James M. Miller

Tyson Kamuf

Counsel for Big Rivers Electric Corporation

mes M. Melen

JMM/ej

Enclosures

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COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

AN ASSESSMENT OF)
KENTUCKY'S ELECTRIC) ADMINISTRATIVE
GENERATION, TRANSMISSION)
AND DISTRIBUTION NEEDS)

ADMINISTRATIVE
CASE NO. 2005-00090

BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE SECOND DATA REQUEST OF THE COMMISSION STAFF OF APRIL 28, 2005

May 13, 2005

BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE SECOND DATA REQUEST OF THE COMMISSION STAFF OF APRIL 28, 2005 ADMINISTRATIVE CASE NO. 2005-00090 May 13, 2005

 Item 1) Explain how the development of Regional Transmission Organizations ("RTO") and the possibility of greater competition in the wholesale market has impacted your planning decisions. Also, provide a discussion of how RTOs have affected your strategy regarding making off-system sales and your ability to arbitrage.

Response) The development of RTOs has not significantly impacted Big Rivers' wholesale market planning decisions. Big Rivers' Transmission Department mission remains the same as before the advent of RTOs, and that is to provide adequate, safe, reliable and cost effective electric transmission services to member cooperatives, generation plants lessee, and third party transmission customers, and so Big Rivers' planning decisions are also unaltered.

Big Rivers' forward trades are through bilateral agreements. Big Rivers has some next day and hourly trades into RTOs if prices are favorable. An advantage to trading in an RTO is that Big Rivers has the ability to bid in odd lots of power.

Witness) C. William Blackburn Travis Housley, P.E.

BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE SECOND DATA REQUEST OF THE COMMISSION STAFF OF APRIL 28, 2005 ADMINISTRATIVE CASE NO. 2005-00090 May 13, 2005

March 10, 2005 Order. Over the years 2000-2004, upon completion of the Weyerhaeuser

cogeneration project, Big Rivers' native load weather-normalized peak demand declined

by roughly 50 MW and was less in both 2003 and 2004 than the 610 MW 2002 demand.

With this background, identify and describe the factors which contribute to the small, but

consistent, growth of 10 to 14 MW per year shown in Big Rivers' demand forecast.

Refer to Items 5 and 7 of Big Rivers' response to the Commission's

Item 4)

Witness) C. William Blackburn

Response) The only factor that contributes to the small, but consistent, growth of 10 to 14 MW (~1.7%) per year of Big Rivers' demand forecast is the rural load growth (~2.3%) as shown in Big Rivers' 2003 Load Forecast.

Actual peak demand is influenced by other factors. Big Rivers is actually a summer peaking utility but when a year has a moderate to severe winter with a mild summer, an annual peak demand can be set in the winter. This was the case in 2003. The peak demand for Big Rivers in 2003, as shown in the response to Item 5 of Big Rivers' response to the Commission's March 10, 2005 Order, is a winter peak number while the 2002 and 2004 peak demands were in the summer.

In addition, Big Rivers' Members have an uncommon load distribution relative to load class. In general, their industrial demand is 20% of their total demand. Some of the Big Rivers Member industrial customers load requirements can swing by as much as ten megawatts from one hour to the next. If these industries' load shapes are combined with the more predictable aggregated load shapes of the remaining industries, the annual energy can easily be forecast. However, the single hour demand forecast for the year is far more challenging than the annual energy forecast. The random industrial load swings make it next to impossible to apply a coincidence factor for those loads to be included in the single hour annual demand forecast.

BIG RIVERS ELECTRIC CORPORATION'S RESPONSE TO THE SECOND DATA REQUEST OF THE COMMISSION STAFF OF APRIL 28, 2005 ADMINISTRATIVE CASE NO. 2005-00090 May 13, 2005

Refer to Item 10(e) of Big Rivers' response to the Commission's March Item 5) 10, 2005 Order. Big Rivers shows Green Two with a net capacity rating of 223 MW. However, EIA 2003 data shows Green Two with a rating of 233 MW. Explain which is accurate.

Green Unit Two has a net capacity rating of 223 MW. Big Rivers' Response) response to Item 10(e) to the Commission's March 10, 2005 Order is correct.

David Spainhoward Witness)